

DOCUMENT RESUME

ED 451 713

FL 026 645

AUTHOR Shih, Yu-Chih Doris; Cifuentes, Lauren
TITLE Online ESL Learning: An Authentic Contact.
PUB DATE 2000-11-00
NOTE 10p.; Paper presented at the International Conference on Computers in Education/International Conference on Computer-Assisted Instruction (8th, Taipei, Taiwan, November 21-24, 2000).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS College Students; *Computer Uses in Education; *English (Second Language); Foreign Countries; Higher Education; *Intercultural Communication; Internet; Learning Strategies; Preservice Teachers; Second Language Instruction; Second Language Learning; Student Attitudes; Student Motivation; World Wide Web
IDENTIFIERS Taiwan

ABSTRACT

As international communication becomes faster, cheaper, and ever more ubiquitous, learning through online technologies is more available. In a telecommunications project between U.S. pre-service teachers and Taiwanese English-as-a-Second-Language (ESL) learners, Taiwanese students practiced English and discussed cultural information with U.S. partners who served as tutors. Data revealed that Taiwanese ESL learners perceived online learning of the English language and American culture to be valuable for its authenticity. Instructions on intercultural communications were found to be necessary prior to the connection in order to help eliminate misunderstandings between participants of the two countries. The success of online learning depended on several factors such as participants' motivation and attitudes, technology, preparation, and support services. Furthermore, Taiwanese learners who had successful experiences applied 10 strategies to ESL learning. These strategies were employed during a circular process of online learning. (Contains 37 references.) (Author/KFT)

Online ESL Learning: An Authentic Contact

Yu-Chih Doris Shih* and Lauren Cifuentes**

*Department of Educational Curriculum & Instruction, Texas A&M University
4205 Boyett St., #C, College Station, TX 77801, USA

E-mail: dorissihh@hotmail.com

** Department of Educational Psychology, Texas A&M University
College Station, TX 77843, USA

E-mail: laurenc@tamu.edu

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

Yu-Chih D. Shih

As communication via telecommunications become easier, learning through online technologies is made possible. In a telecommunications project among US preservice teachers and Taiwanese English as a Second Language learners, Taiwanese students practiced English language and discussed cultural information with US partners who served as online tutors. Data revealed that Taiwanese ESL learners perceived online learning of English language and American culture to be valuable for its authenticity. Instructions on intercultural communication skills were found to be necessary prior to the connection in order to help eliminate misunderstandings between participants of two countries. The success of online learning depended on several factors such as participants' motivation, participants' attitudes, technology, preparation, and support services. Furthermore, Taiwanese learners who had successful experiences applied ten strategies to their ESL learning. These strategies were employed during a circular process of online learning.

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
originating it.

Minor changes have been made to
improve reproduction quality.

Points of view or opinions stated in this
document do not necessarily represent
official OERI position or policy.

Keywords: ESL, Online Learning, Telecommunications, Intercultural
Computer-Mediated Communications

1 Introduction

The purpose of this research was to investigate a telecommunications project for Taiwanese students to learn the English language and acquire cultural information through online technologies. Preservice teachers (PSTs) at a state university in the United States worked with Taiwanese learners of English as a Second Language (ESL) at a Taiwanese university. The goal of the research was to study intercultural online learning.

In Taiwan, many scholars have been discussing the need for educational reform and change of instructional methods [7][36]. One change under consideration is increased use of online instruction. Taiwanese researchers suggested that the educational reform should include the adoption of methods proposed in the West (i.e., the United States, Great Britain, Australia, and other English-speaking countries), such as involving students in active learning, teaching critical thinking skills, and incorporating individualized instruction [4][25]. Harasim (1990) and Owston (1997) believed that instruction could be enhanced by online teaching. They have stated that online instruction allows for active learning, idea generating, idea linking, and idea structuring as well as helps the students to develop skills in critical thinking and problem solving. Individualized instruction is supported because both synchronous and asynchronous modes of instruction are workable through technologies.

When online teaching is used as a language instructional method, it remedies Taiwan's geographical isolation as an island and provides opportunities for ESL learners to communicate in an authentic English environment. Successful second language (L2) learning includes not only knowing the linguistic features of the language but also understanding the cultural concepts [14]. Sayers and Brown (1987) remarked, "foreign language students need authentic contacts with native speakers and much practice in a range of language skills -- including reading and writing -- if they are to develop cultural awareness and communicative competence" (p. 23). L2 learners learn language and culture if instruction is facilitated by supportive individualized learning

F126645

activities [13]. These activities must address the learner's current language level (Krashen's stage of *i*) and the level beyond the present language and literacy capacities (Krashen's stage of *i + 1*) [21]. Telecommunications can help overcome the limitations of Taiwanese isolation by providing for supportive and authentic language instruction.

2 Literature Review

Learning through telecommunications has evolved during the 1990s in the West and has proved to be successful [1][8]. To bring more applications into Taiwan, we need to first explore Taiwanese students' needs and attitudes in the use of such technology. Some scholars stated that Asian students employ different learning strategies than students in the West [17][32]. Cheng (1980) pointed out that the educational system in Taiwan has adopted many different educational methods developed in the West; however, utilization has been non-systematic and inappropriate for societal needs in Taiwan. Furthermore, Stewart (1985) and Dooley (1995) noted that the applications of educational technology in other countries besides the United States may be unsuitable because of cultural non-transferability. For instance, other cultures may value a different set of learning and teaching modes when compared to the United States, or they may have insufficient equipment for advanced technological applications. Taiwanese scholars have also urged that future investigations must be done specifically on distance-learning courses in Taiwan [6][37]. Therefore, close examination must be carried out prior to fully adopting new telecommunication technologies as learning tools in Taiwan.

As technology advances, communication over a distance and across cultures becomes easier and inevitable. However, very little can be found in the literature that addresses issues of online intercultural communication and the design considerations that would enhance such interaction. Lee (1999) urged designers and instructors of computer-based instruction to take cultural issues into consideration when developing learning environments and technology integration within curricula. Caution must be taken, especially when intercultural contacts occur in an online learning context, because communicators may not be who they seem to be online [28].

Collis and Remmers (1997) pointed out that to allow successful online cross-cultural contact, at least four issues have to be taken into consideration: communication and interaction, language, content, and representation form. First, communication and interaction are easily misinterpreted across cultures. According to the two researchers, more communication and interaction are not necessarily better than less, and well-structured communication may be preferable for wider audiences. Second, because language includes verbal and nonverbal cultural communication, those developing cross-cultural online instruction must be sensitive to cultural differences in communication styles. Third, designers must choose cross-cultural course content. Last, visuals can overcome problems associated with text-based language. However, one must be sensitive to cultural differences in the acceptability and interpretability of various aspects of visualization.

Research on online connections has been conducted in many areas during this decade. Projects connecting students with teachers or other students in multiple locations were implemented in many subject areas such as science [22], history [3], teaching [27], and language arts [35]. Similar projects in the area of foreign language learning are found in the teaching of Portuguese [20], Russian [30], Spanish [24], and ESL [19][33]. The results of these studies mainly stated how the participants at different sites benefited from the connection in increased technical competence, personal development, language improvement, and more meaningful cultural exchanges. No research has been found that explores the learning strategies used by students while learning a L2 online and the issues encountered during their online intercultural communications.

3 Purposes and Research Questions

There were three purposes of this study: first, understanding the Taiwanese ESL learners' perceptions of learning through distance technologies; second, exploring issues related to online intercultural communication; and third, identifying the learning strategies the Taiwanese learners employed during distance learning to accomplish the acquisition of ESL and understanding of American culture. The three research questions guided the study were:

- (1) How do ESL learners in Taiwan perceive language acquisition and cultural understanding via distance learning technologies after the experience?
- (2) What intercultural phenomena can be observed in online learning for Taiwanese students?

- (3) What online learning strategies do the Taiwanese use while learning the English language and learning about American culture?

4 Method

This study employed a qualitative research design. This design enabled the researcher to inquire, comprehend, and describe the experiencing world of the participants and the meaning of these experiences [2][26].

4.1 Participants

The project involved students in two different countries: US and Taiwan. There were 40 PSTs in the United States who took either *EDTC 305: Instructional Technology: Theory and Practice* or *INST 462: Language Acquisition and Development* at a state university. These were PSTs being prepared to teach English, ESL, political science, and history at the elementary or secondary level. The same number of participants in Taiwan were students who study in the Department of English Language and Literature at a university in Taipei, Taiwan. They were members of *English Composition and Conversation* classes at either sophomore or junior levels. The US and Taiwanese students participated in this research because their instructors included this online connection project as part of their course requirement. The participants in the United States ranged from the ages of 20 to 22, while the students in Taiwan ranged from the ages of 19 to 20.

In addition, the three professors in Taiwan whose students were project participants were also involved as research subjects. They were interviewed by the researcher in regard to their students' perceptions of online experiences, students' improvement in the English language as well as other types of knowledge through the connection.

4.2 Procedures

To carry out the study, US PSTs corresponded with Taiwanese university-level ESL learners for ten weeks. These PSTs served as tutors of the English language and American culture. The participants in both countries were matched one-on-one randomly prior to the connection. They were also given instructions and orientations on the utilization of e-mail systems and on online learning/teaching. The PSTs were provided with a lecture, discussion, supportive readings, example tutorial correspondences, and a web site of resources. The web site included a downloadable lecture about online learning, the expected online correspondence process guidelines, a midterm survey, sample correspondence, and previous participants' reflections (<http://www.coe.tamu.edu/~lcifuent/classes/edtc305/online.htm>). They also read on topics such as effective facilitation of computer conferencing [9], computer-mediated communication [18], interactivity in online environments [15], online teaching strategies [8], and cultural differences in teaching and learning [17].

Similarly, the students in Taiwan were supplied with an orientation where the project is introduced to them along with rules and regulations. Sample correspondence, results of previous connections, and suggestions for online learning and discussion topics were presented at their departmental website (http://www.eng.fju.edu.tw/cultural_connections.htm).

Every participant received a welcome letter to encourage them to open themselves up to this new experience. The PSTs were given a rubric with expected number grades to help them accomplish the requirements for their part of the connection. The Taiwanese students initiated the connection by sending out their first e-mail message to their US partners. The US PSTs analyzed their student's language level and started to instruct him or her according to that level through e-mail.

Mid-way during the ten-week connection, the PSTs were asked to fill out an online midterm survey. In Taiwan, the students submitted a brief report to their instructors every two weeks to keep track of their connection progresses.

At the end of the connection, the PSTs and their Taiwanese students filled out a post-connection survey. The PSTs also handed in all of their e-mail printouts and personal journals that reflected their online teaching and learning experiences. Similarly, the Taiwanese students handed in their final reports to their Taiwanese instructors. Two weeks after the end of the connection, the researcher traveled to Taiwan to conduct interviews with 12 Taiwanese students and the three Taiwanese professors. The interviews included open-ended

questions.

4.3 Data Collection and Analysis

There were eight data sources: (a) printouts of correspondence; (b) the PSTs' midterm survey; (c) the PSTs' post-connection survey; (d) the Taiwanese students' post-connection survey; (e) the PSTs' reflective journal entries; (f) the Taiwanese students' final reports; (g) transcripts of the interview with the Taiwanese students; and (h) transcripts of the interview with the Taiwanese professors.

Data analysis in qualitative studies is an ongoing process during the research; it is best done simultaneously with the data collection [26]. Each time data are gathered, information was analyzed using procedures proposed by Emerson, Fretz, and Shaw (1995). The steps included close reading, open coding, writing memos, noting themes and patterns, and focused coding.

5 Results

Data analyses revealed remarkable information on the areas of (a) learner perception, (b) intercultural communication, (c) factors affecting online connection, (d) online learning strategies, and (e) online learning processes. First, this particular group of Taiwanese ESL learners was positive about L2 and cultural learning in an online setting. The results of a post-connection survey showed that participants more or less agreed that (a) E-mail connections have a positive place in ESL classrooms (mean of 3.71); (b) the Web-connection has a positive place in ESL classrooms (mean of 3.51); (c) they would participate in another online connection if given the opportunity (mean of 3.58); and (d) they would suggest their other friends or classmates participate in a similar project (mean of 3.85) (see Table 1). Even though the response to the question "Overall, my connection was successful" was not very high (mean of 3.26), learners who had an unsuccessful connection held positive attitudes toward the project. One student wrote in her final report, "My pal does not respond to me so often. I didn't learn much through this project this semester. But that doesn't mean this project is not good. I hope school brothers or sisters can still have the chance to get in this project."

Table 1. Taiwanese Students' Responses Toward the Online Connection

Questions	M	SD
The E-mail connection has a positive place in ESL classrooms.	3.71	0.67
The Web-board connection has a positive place in ESL classrooms.	3.51	1.50
I would participate in another online connection if given the opportunity.	3.58	1.13
I would suggest other friends or classmates participate in a similar project.	3.85	0.78
Overall, my connection was successful.	3.26	1.07

Note. Participants responded on a 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree). The survey was complete by 37 participants.

Second, intercultural communication issues cannot be ignored. A lot of Taiwanese learners interpreted that their tutors were angry with them when they did not receive messages over a week. In addition, learners read what wasn't intended in the messages. They constantly apologized to the PSTs for being an inconvenience. Several learners ceased active interaction with the PSTs due to these personal interpretations. The Taiwanese professors suggested that acquainting learners with different thinking patterns and expression styles is necessary in future connections.

Third, factors that affected online connections included participants' motivation, attitudes toward each other, participants' fields of experience, frequency and quality of interactions, technology, preparation, and support services (figure 1). Any missing component would hinder the success of the connection. Other resources such as teachers, peers, family members, libraries, and web resources provided extra assistance to the participants. Fourth, during the correspondences, ten learning strategies were found to be used by the learners in their messages. These were paraphrasing, translation, Q&A from tutor to student, Q&A from student to tutor, explanation, elaboration, decision-making, self-reflection, metacognition, and transfer. The learners in the more successful pairs tended to use a variety of the ten strategies.

Finally, data indicated these ESL learners went through a series of processes for successful learning (figure 2). Motivated learners set learning goals for themselves with the PSTs' help. Those who prepared themselves well by finding topics of discussion or information in the libraries, the WWW, and traditional learning environment

aimed for frequent and quality interactions via e-mail with the PSTs. After each interaction, a review period prompted learners for more interactions. Learners who went through these stages concluded that they had learnt new information and increased their confidence in using English reading and writing skills. Needless to say, this result increased their motivation to learn and thus encouraged the start of another learning cycle.

6 Discussions and Conclusion

This study is significant to both distance-learning educators and language-learning educators. There are at least three reasons for this significance. First, the study provides insights for distance educators, both for those in Taiwan and for those in other countries who have Taiwanese students enrolled in courses that are delivered via telecommunications. The results of the study help these instructors to further understand Taiwanese students' positive perceptions of L2 learning through online technologies, identify suitable conditions and environment for these learners, and decide the extent to which this mode of instruction is applicable to students from this cultural background.

Second, the online intercultural communications issues explored in this study assist telecommunications users with more effective communication. They help users become aware of and anticipate problems when coming into contact with people of other cultures via distance technologies. Even without using online technologies, intercultural communication is already complex. Therefore, interaction may be hindered further when technology is the transmission medium. Understanding the barriers and facilitators of online intercultural communication leads to better and more successful intercultural interactions.

Third, the identified ten online learning strategies and online learning processes will add to the literature on language learning and teaching. Such research is in demand because ESL programs in the United States are planning to deliver more ESL courses to foreign countries via distance learning technologies.

In summary, most Taiwanese ESL learners had a positive experience with the online connection. The few connections that failed were due to lack of participants' response, lack of participants' motivation, and technical failure. Nevertheless, providing L2 instruction to learners over cyberspace is a method that should not be ignored. Learners need to be prepared with adequate intercultural communication skills and online learning strategies.

Follow-up investigation of online ESL acquisition might include specific amount of improvement on learners' writings and learning via synchronous technologies such as chats, interactive videoconferences, and desktop videoconferences.

References

- [1] Bates, A. W., "Technology, open learning and distance education", Routledge (1995)
- [2] Bogdan, R. C., & Biklen, S. N., "Qualitative research in education: An introduction to theory and methods", Allyn & Bacon, 3rd ed (1998).
- [3] Butler, W. M., "Writing to learn history on-line", *The Clearing House*, Vol. 69, No. 1, pp. 17-19 (1995)
- [4] Chang, H-J., "Trends of instructional methods", *Social Change and Educational Development*, pp. 483-522, Taiwan Bookstore (1991)
- [5] Cheng, S-H., "Chinese contemporary history of education", San-Ming bookstore (1980)
- [6] Chou, C., Chou, J., & Tyan, N. N., "An exploratory study of Internet addiction, usage and communication pleasure - The Taiwan's case", *International Journal of Educational Telecommunications*, Vol. 5, No. 1, pp. 47-63 (1999)
- [7] Chu, C-C., "Social change and current educational system", *Social Change and Educational Development* pp. 37-65, Taiwan Bookstore (1991)
- [8] Cifuentes, L., & Shih, Y-C D., "Teaching and learning online: A collaboration between U.S. and Taiwanese students", *Journal of Research on Computing in Education*, Manuscript accepted for publication (2000)
- [9] Cifuentes, L., Murphy, K.L., Segur, R., & Kodali, S., "Design considerations for computer conferences", *Journal of Research on Computing in Education*, Vol. 30, No. 2, pp.172-195 (1997)
- [10] Collis, B. & Remmers, F., "The World Wide Web in education: Issues related to cross-cultural communication and interaction", *Web-based instruction*, pp. 85-92, Educational Technology Publications

- (1997)
- [11] Dooley, L. M., "Problems and issues in distance learning using interactive video between the U.S. and selected African countries", *International Journal of Educational Telecommunications*, Vol. 1, No. 1, pp. 93-104 (1995)
 - [12] Emerson, R. M., Fretz, R. L., & Shaw, L. L., "Writing ethnographic fieldnotes", The University of Chicago Press (1995)
 - [13] Enright, D. S., "Supporting children's English language development in grade-level and language classrooms", *Teaching English as a Second or Foreign Language*, pp. 386-402, Heinle & Heinle (1991)
 - [14] Fantini, A. E., "Bilingualism: Exploring language and culture", *Language, culture and cognition*, pp. 110-119, Multilingual Matters (1981)
 - [15] Gunawardena, C. N., "Changing faculty roles for audiographics and on-line teaching", *The American Journal of Distance Education*, Vol. 6, No. 3, pp. 58-71 (1992)
 - [16] Harasim, L. M., "Online education: An environment for collaboration and intellectual amplification", *On line Education Perspectives on a New Environment*, pp. 39-64, Praeger (1990)
 - [17] Hofstede, G., "Cultural differences in teaching and learning", *International Journal of Intercultural Relations*, Vol. 10, pp. 301-320 (1986)
 - [18] Jonassen, D. H., Davidson, M., Collins, M., Campbell, J., & Haag, B. B., "Constructivism and computer-mediated communication in distance education", *American Journal of Distance Education*, Vol. 9, No. 2, pp. 7-25 (1995)
 - [19] Kanhi-Stein, L., "Promoting EFL teacher development through e-mail instruction", *Computer-Assisted English Language Learning Journal*, Vol 7, No. 4, pp. 14-19 (1997)
 - [20] Kelm, O. R., "The use of synchronous computer network in second language instruction: A preliminary report", *Foreign Language Annals*, Vol. 25, No. 5, pp. 441-454 (1992)
 - [21] Krashen, S. D., "The fundamental pedagogical principle in second language teaching", *Studio Linguistica*, Vol. 35, No. 1-2, pp. 51-70 (1981)
 - [22] LeBaron, J., & Teichmann, V., "KITES: A middle school environmental science telelink to West Germany", *Educational Technology*, Vol. 29, No. 6, pp. 51-53 (1989)
 - [23] Lee, C. D., "Towards a framework for culturally responsive design in multimedia computer environments: Cultural modeling as a case", Paper presented at 1999 American Educational Research Association Convention at Montreal, Canada (1999)
 - [24] Leh, A. S., "Electronic mail in foreign language learning: Communication and culture", ERIC Document Reproduction Service No. ED409851, Association for Educational Communications and Technology (1997)
 - [25] Lin, S-C., "Current social change and instructional reformation in Taiwan", *Social Change and Educational Development*, pp. 459-482, Taiwan Bookstore (1991)
 - [26] Lincoln, Y. & Guba, E., "Naturalistic inquiry", Sage (1985)
 - [27] Lowry, M., Koneman, P., Osman-Jouchoux, R., & Wilson, B., "Electronic discussion groups: Using E-mail as an instructional strategy", *Tech Trends*, Vol. 39, No. 2, pp. 22-24 (1994)
 - [28] Newbold, W. W., "Transactional theory", <http://www.bsu.edu/classes/newbold/htx/theory.htm> (accessed on July 20, 1999).
 - [29] Owston, R. D., "The World Wide Web: A technology to enhance teaching and learning?" *Educational Researcher*, Vol. 26, No. 2, pp. 27-33 (1997)
 - [30] Samsonov, P., "Russian translation via e-mail", *IALL Journal of Language Learning Technologies*, Vol. 30, No. 3, pp. 39-42 (1998)
 - [31] Sayers, D., & Brown, K., "Bilingual education and telecommunications: A perfect fit", *The Computing Teacher*, Vol 15, No. 8, pp. 23-24 (1987)
 - [32] Smith, P. J. & Smith, S. N., "Differences between Chinese and Australian students: Some implications for distance educators", *Distance Education*, Vol. 20, No. 1, pp. 64-80 (1999)
 - [33] Soh, B-L, & Soon, Y-P., "English by e-mail: Creating a global classroom via the medium of computer technology", *ELT Journal*, Vol. 45, No. 4, pp. 187-292 (1991)
 - [34] Stewart, A., "Appropriate educational technology: Does 'appropriateness' have implications for the theoretical framework of educational technology?" *Educational Communication and Technology*, Vol. 33, No. 1, pp. 58-65 (1985)
 - [35] Traw, R., "School/university collaboration via e-mail: A unique approach to teaching reading and language arts", *Tech Trends*, Vol. 39, No. 2, pp. 28-31 (1994)
 - [36] Wang, C-Y., "Social science education in social change", *Social Change and Educational Development*, pp. 147-164, Taiwan Bookstore (1991)
 - [37] Young, S., "A field study of the implementation of a synchronous distance course with asynchronous Internet-supported telecommunications technologies in Taiwan, R. O. C.", *International Journal of Educational Telecommunication*, Vol. 5, No. 2, pp. 111-125 (1999)

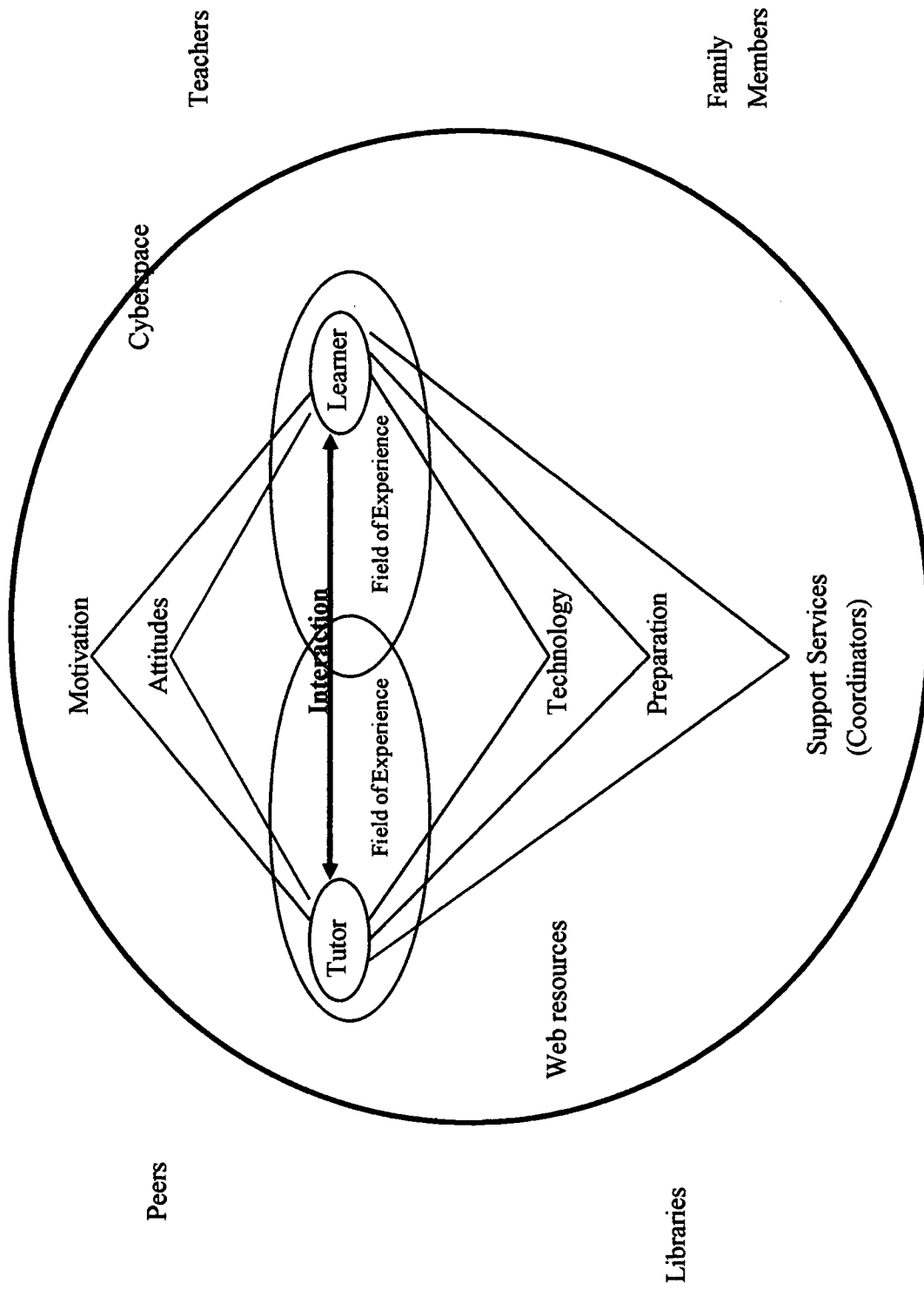


Figure 1. Factors Affecting Online Connections

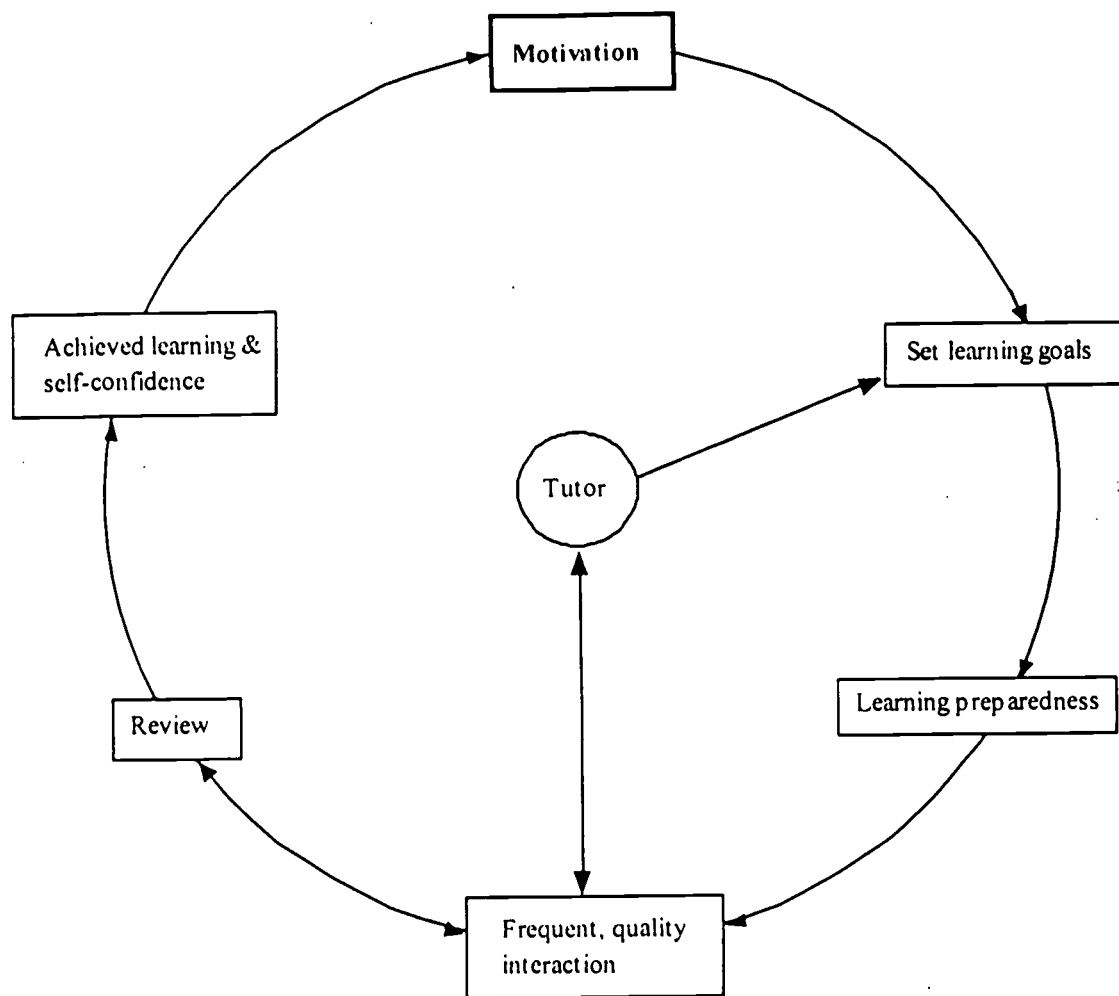


Figure 2. Online Learning Processes in the United States-Taiwan Connection.



U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)



REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title:

Online ESL Learning: An Authentic Contact

Author(s): Shih, Yu-Chih D. & Cifuentes, Lauren

Corporate Source: The 8th International Conference on Computers
in Education/International Conference on Computer-Assisted Instruction
proceedings 2000.

Publication Date:

November, 2000

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be
affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

1

Level 1



The sample sticker shown below will be
affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL IN
MICROFICHE, AND IN ELECTRONIC MEDIA
FOR ERIC COLLECTION SUBSCRIBERS ONLY,
HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

2A

Level 2A



The sample sticker shown below will be
affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL IN
MICROFICHE ONLY HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

2B

Level 2B



Check here for Level 1 release, permitting
reproduction and dissemination in microfiche or other
ERIC archival media (e.g., electronic) and paper copy.

Check here for Level 2A release, permitting reproduction
and dissemination in microfiche and in electronic media
for ERIC archival collection subscribers only

Check here for Level 2B release, permitting
reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign
here,
please

Signature:

Yu-Chih Doris Shih

Printed Name/Position/Title:

Yu-Chih Doris Shih, Ph.D.

Organization/Address:

3rd Fl., No. 17, 427 Lane,
Fu-Hsing North Rd.
Taipei, Taiwan.

Telephone:

886-2-2545-0650

FAX:

886-2-2545-0650

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility

4483-A Forbes Boulevard
Lanham, Maryland 20706

Telephone: 301-552-4200

Toll Free: 800-799-3742

FAX: 301-552-4700

e-mail: ericfac@inet.ed.gov

WWW: <http://ericfac.piccard.csc.com>